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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/844,662	04/27/2001	Eva Raschke	8325-0012	9004
20855	7590	01/12/2005	EXAMINER	
ROBINS & PASTERNAK 1731 EMBARCADERO ROAD SUITE 230 PALO ALTO, CA 94303			WAX, ROBERT A	
			ART UNIT	PAPER NUMBER
			1653	

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center">Office Action Summary</p>	Application No. 09/844,662	Applicant(s) RASCHKE ET AL.	
	Examiner Robert A. Wax	Art Unit 1653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on October 29, 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,6-18,20-24,27 and 57-86 is/are pending in the application.
- 4a) Of the above claim(s) 1-3,6-18,20-24,27,58,59,61 and 72-86 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 57,60 and 62-71 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment filed October 29, 2004 has been entered and the arguments considered. The objection to the specification for containing an embedded hyperlink is withdrawn in view of the amendment to the specification deleting the hyperlink. Applicants' arguments regarding Robertson et al. are convincing and the rejections based thereon are hereby withdrawn. Since claim 69 had been rejected only over Robertson et al., and the rejections over Aoki et al. are being maintained, this Office action contains a new ground of rejection of claim 69 as obvious over Aoki et al. in view of Greisman et al. Thus, the instant Office action is a non-final rejection.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 57, 62-68, 70 and 71 are again rejected under 35 U.S.C. 102(b) as being clearly anticipated by Aoki et al.

This rejection was explained in the previous Office action.

Claim Rejections - 35 USC § 103

4. Claim 60 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki et al. in view of Greisman et al. and Neely et al.

This rejection was explained in the previous Office action.

5. Claim 65 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki et al. in view of Greisman et al. and Gross et al.

This rejection was explained in the previous Office action.

6. Claim 69 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki et al. in view of Greisman et al.

Aoki et al. disclose a complex of RP58 (Repressor Protein with molecular mass of 58 – see abstract), a DNA binding protein having zinc finger motifs (page 26701, left column, lines 1-5) in a human cell.

Greisman et al. teach a strategy for selecting high-affinity zinc finger proteins for diverse DNA target sites. Additionally, at column 7, lines 29-30, they state that the zinc finger proteins provide “means for developing plants with altered phenotypes. . .”

It would have been obvious to one of ordinary skill in the art at the time the invention was made to complex a zinc finger protein with the chromatin in a plant cell in view of the conventionality of doing so taught by Greisman et al.

Response to Arguments

7. Applicants' arguments filed October 29, 2004 have been fully considered but they are not persuasive.

Applicants argue that the accessible regions of chromatin recited in the claims are not the same as the condensed chromatin of Aoki et al. and rely on the definitions of "accessible region" in the specification. These definitions are reproduced and discussed below.

Page 4 of the specification states, "Accessible regions are determined, for example, by identifying regions in cellular chromatin that are hypersensitive to the action of various structural probes, either chemical or enzymatic." Aoki et al. teach that the RP58 probe binds preferentially to the condensed chromatin, thus, it must be more sensitive to the probe than other regions of chromatin. Examiner is of the opinion that the chromatin of Aoki et al. thus falls within the definition of an accessible region on page 4.

Page 11 of the specification states, "An accessible region is a site in a chromosome, episome or other cellular structure comprising a nucleic acid, in which a target site present in the nucleic acid can be bound by an exogenous molecule which recognizes the target site." Clearly, the chromatin of Aoki et al. meets this criterion as well since the nucleic acid is bound by the RP58.

Page 13 of the specification states, "An accessible region in cellular chromatin is generally one that does not have a typical nucleosomal structure. As such, an accessible region can be identified and localized by, for example, the use of chemicals and/or enzymes that probe chromatin structure. Accessible regions will, in general, have an altered reactivity to a probe, compared to bulk chromatin. An accessible region may be sensitive to the probe, compared to bulk chromatin, or it may have a pattern of sensitivity that is different from the pattern of sensitivity exhibited by bulk chromatin. Accessible regions can be identified by any method known to those of skill in the art for probing chromatin structure." Examiner sees no reason why RP58 would not be considered to be a chemical probe that detects zinc finger binding motifs in chromatin. Applicants argue that because "accessible regions of chromatin do not have typical nucleosome structures" then they "are not condensed or highly condensed regions of chromatin." Examiner disagrees that the conclusion is mandated by the definition Applicants have chosen to use for "accessible regions". Another perfectly reasonable definition is that an "accessible region" is one to which nucleic acid-specific probes bind. Under this definition the DNA in the chromatin of Aoki et al. is accessible since RP58 binds to it. Also, there is no teaching in Aoki et al. about the specific structure of the condensed chromatin, it may well not have a "typical nucleosomal structure" or Applicants' premise is incorrect.

For these reasons, the rejections over Aoki et al. are maintained.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert A. Wax whose telephone number is (571) 272-0623. The examiner can normally be reached on Monday through Friday, between 9:00 AM and 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jon P. Weber can be reached on (571) 272-0925. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Robert A. Wax
Primary Examiner
Art Unit 1653

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